



# The binocular-specialist!





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Congratulations, you have purchased one of the finest binoculars in the world. With proper care your Steiner binocular will deliver top performance for over a lifetime. This manual will provide you with all the necessary instructions and tips to ensure you the maximum use and enjoyment of your binocular We will cover everything from holding your binocula properly to storing it safely.

#### INTRODUCTION

**Dear Customer,** Steiner has been producing binoculars for over 55 years in Bayreuth, Germany. Founded by Karl Steiner in 1947, Steiner has become the largest

manufacturer of binoculars in Europe. Today, Carl Steiner continues his father's tradition of excellence by maintaining the company focus on producing only binoculars. This focus has made Steiner binoculars synonymous with the highest standard of quality worldwide.

Steiner's goal is to continue building the toughest and most weather resistant binocular available. We deliver unsurpassed brightness and clarity using space age materials and the latest in optical technology. Our binoculars are not only stronger but also more lightweight than

other binoculars, the ideal combination for anyone using

## **Optical Performance**

Steiner binoculars are light, easy to handle, versatile, and extremely rugged. We construct our binoculars with Makrolon, a lightweight reinforced polycarbonate

material. Makrolon is more impervious to temperature and atmospheric extremes than most metal alloys or plastics that are commonly used to produce binoculars. In

addition, we use only the highest quality optical glass available. Steiner also leads the industry with our proprietary optical coatings. Depending on the intended use of the binocular, we have a coating specific to your every need.

There are many models and series available. If your binocular is not featured in this manual, please follow the care and instructions along with a similar model referenced in this booklet. Check our website or catalog for the complete Steiner selection.



Carl Steiner President & Owner

We manufacture nearly every part that goes into a Steiner binocular. This is how we can maintain and guarantee the finest quality construction, attention to detail and high standard of excellence with every binocular we produce.

Carl Steiner
STEINER-OPTIK

# ADJUSTING AND USING YOUR

**BINOCULAR**. Adjusting the binocular begins by setting the interpupilary distance. This is the distance between the pupils of your eyes. The binocular tubes pivot on a hinge, moving the tubes closer or further apart. Pivot the binocular

tubes until you see a single image when looking through the binocular. Our larger binoculars feature one center hinge while the ultra-light models have two hinge pins.

# **Important!**

Resting your elbows on your knees or your vehicle will help you to steady the binocular. Hold the binocular with both hands for best comfort and steadiness.

- When holding and viewing with your binocular, use both hands. Your grip should be firm but not too aggressive.
- Wrap you fingers around the tubes and pull the binocular to your eyes as firmly as possible without

obstructing the view or straining. The goal is to hold the

binocular as steady as possible.

■ If possible, try to use a tree, a wall, or a vehicle to help steady yourself with the binocular. The image quality will improve with a steady and firm hold.

Steiner binoculars provide long eye relief for eyeglass or sunglass users. By folding the rubber eyecups down and over the eyepiece you will increase the eye relief of the binocular.

HOW TO USE THE SPORTS AUTO-FOCUS. All our individual focus models feature Sports Auto-Focus. The advantage to this feature is that it allows you to view images from 20 yards to infinity without having to refocus for different distances. Of course you can focus closer than 20 yards but you will give up some depth of field at longer distances. Higher power models (10x or more) will be in focus from 30-40 yards to infinity. The proper way to focus

the Sports Auto-focus is:

- Choose an image, sign or a tree approximately 50 yards away to view.
- Cover one of the objectives lenses.
- Look through the binocular with both eyes open.
- Turn the eyepiece of the uncovered lens until the image appears clear and sharp.
- Now repeat the procedure with the opposite lens.
- When viewing through both lenses, all images from 20 yards to infinity will be bright, clear and sharp.
- Make note of your diopter setting as it can be unique to each user.
- Higher power models (10x-20x) may require higher initial focus distance.
- Some models feature the new Memory Ocular. See following instructions for the Commander V.



Sports-Auto-Focus-System



Fast-Close-Focus-System

# HOW TO FOCUS THE MEMORY OCULARS AND THE COMMANDER V.

The Commander V and some other models feature Sports Auto-Focus along with the Memory Oculars. Use the previously described steps to focus the binocular for your eyes. Follow the steps below to set the memory on the eyepieces:

Press the two tabs on the lower side of the focus ring while gently pulling up on the eyepiece.

- Next turn the memory indicator, which is the small arrow shape, to the line on the eyepiece.
- Gently push the focus ring in place and release the tabs.

■ Now you can quickly check your focus and reset if needed.

See pages 22-23

for further information.

7x50 Commander V

#### FOCUSING STEINER ROOF PRISM MODELS.

- Chose an image like a tree or a sign approximately 50 yards away to view.
- Cover the left objective lens.
- Look through the binocular with both eyes open.
- Turn the center focus wheel to make the image appear clear and sharp.
- Repeat these steps with other objective lens covered.
- Turn the diopter wheel until the image is clear and sharp.
- With both eyes open you can now use the focus wheel to focus the binocular for different distances.

# **Important!**

Preset the binoculars focus in daylight conditions. That way in darkness they'll be in focus and offer the highest depth of field.

■ Make note of your diopter setting as it can be unique to each user.

Do not force the diopter wheel or center focus wheel beyond the noticeable stop limits; this can cause internal damage.





**Steiner** has several specific binocular lines for wildlife observation. Our famous **Predator** models have a special optical lens coating that is state of the art. Its purpose is to boost the reds and browns in the color spectrum while reducing the greens and blues. Green and blue are the colors of summer foliage and haze. This coating delivers a highly contrasted view of deer, elk, turkey and most woodland animals against a foliated background allowing you to spot animals quickly and easily. The Steiner **Birding** series feature similar high-contrast while maintaining absolute color fidelity.

The **Nighthunter** is Steiner's high performance low light binocular with over 95% peak light transmission. Our special **High Definition** optical coating increases the light that arrives at your eye. A new stray light prevention system inside the barrels of the binocular eliminates any stray light. And the contoured eyecups eliminate any unpleasant sidelight, providing you with an unbelievable low light experience. These features are also found on the Commander V and other select models.

The **Safari** models reduce 100% UV-A and UV-B for comfortable and precise daylight viewing.

#### HOW TO USE THE RETICLE AND COMPASS.

**The reticle:** Distance and height can be determined with the help of the reticle.

Several examples demonstrate how fast and easy it functions. See formula on next page.

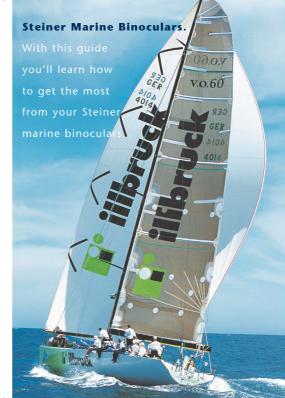
**Range finding:** If you know the height or length of what you are glassing it's easy to determine the range.

### Example:

While sailing, another boat is crossing your course. How far away is it? If the height of the boat is 50 feet and the vertical scale reads 25. Range:  $50/25 = 2 \times 1000 = 2000$  feet.

### Another Example:

You're making a landfall on an island at night. You see the high point of the island in the moonlight which reads 1200 feet on your chart. In your reticle the height reads 20. Range:  $1200/20 = 60 \times 1000$  making it 60,000 feet or approximately 11.36 miles away. Be certain that the initial point of reference is lined up at sea level to assure accurate measurement.



#### HOW TO USE THE ANALOG COMPASS.

Read the bearing to which you are pointing the binocular. Line up the object to which you would like to get the bearing on the vertical scale and read the bearing beneath.

For the Navigator models, since there is no reticle simply line up the target object on the tip of the bearing pointer and take your bearing by pressing the "on-demand" bearing button. Your bearing illuminates in red in the bottom of your viewing field. For analog compass Commander models the bearing is illuminated by daylight and can be illuminated by a touch of the button on the side of the compass at night.

For more information, see pages 20-23



Reticle (Commander V)



Compass Pointer (Navigator II)

#### Formula for Reticle:

Distance:

Actual Height:

actual height

x 1000

scale height

distance x scale height

1000

# HOW TO USE THE COMMANDER ELECTRONIC 7 X 50 DIGITAL COMPASS.

1.) ON/OFF Press ON/M bar to turn compass on. Display will run through a warm-up cycle and display "CAL" (calculating). After two seconds, the display will show the current declination setting, for example "d 0" or "d 10" (See section 5). The binocular will turn itself off after 10 seconds of non-use.



Commander Flectronic Digital Keypad

annual

5.)

declination

off with no reading in the

2.) BEARINGS Press Bearing bar: display shows instant bearing. Hold bearing bar down: Display shows 4 x per second bearing average while you hold the bar down.

3.) MEMORY To enter bearings: Sight the binocular on an object and take the bearing, allow the binocular to turn off on this bearing. The bearing will be automatically saved and will be stored until next usage. When turning the binocular compass on this last bearing will re-appear. To record another bearing, simply repeat this process.

4.) **DECLINATION** The difference of the angle between true north and magnetic north is called declination. This

> can vary by your position on the earth and on the compass orientation towards the magnetic north. This declination can be adjusted on the electronic compass up to +/- 40 degrees maximum. The declination can be found on all marine charts and enhanced topographic maps. Please also

be aware of <u>important!</u>

changes in The batteries are located on the large objective lens side of the binocular SETTING THE under the thumb screw. DECLINATION The Turn to page 20 for compass has to be switched further information

display. Press and hold the bearing bar, at the same time, press the ON button. Then release both at once. The reading "d 00" is shown in the display (if there is a positive or negative number in this location, it may mean that a setting has already been tested or established).

Pressing the BEARING bar while in the declination setting mode decreases the declination by 1 degree increments, pressing the ON button increases the declination.

After setting the current local and correct declination, allow the compass to shut itself off and the declination will be automatically saved and will be viewed during the start-up process (see section 1).

6.) DISPLAY OF LOW BATTERY WARNING If the batteries need to be replaced, reading "b----" will be displayed. If the reading "bott" appears, bearings may no longer be possible or displayed for less than 10 seconds.

#### 7.) OTHER FEATURES:

- Light entrance window (Red window on compass) measures light and automatically adjusts LED display brightness.
- Reticle for determining distance (see page 10).

- 30 year Warranty (1 year on electronic parts)also see page 17.
- Rubber armored for good grip and minimizes slipping on wet surface.
- Long Eye Relief easy use with eye glasses by rolling down the eye cups.



Reticle (Commander Electronic Digital)

# **Important!**

The binocular will turn itself off after 10 seconds of non-use.

do the numbers mean when you see a **7x50** binocular? The first number, in this case the **7**, is the magnification. The 7 means that this particular binocular magnifies the image you are looking at seven times, or makes the image look seven times closer. An example would be if you were looking at something 700 yards away, the view through the binocular looks as if it is only 100 yards away. If you prefer, you can think of the image as being seven times larger.

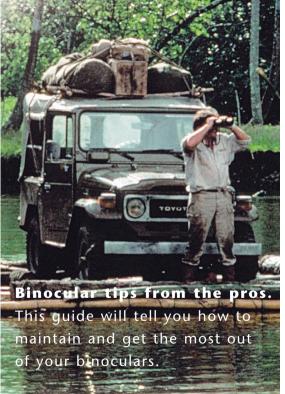
The **second number**, in this case the **50**, is the objective lens diameter. The objective lens is the lens closest to the object you are viewing. A larger objective lens transmits more light to your eye, making the image appear brighter. This also makes the binocular larger and slightly heavier.

Another way to determine **binocular brightness** is by calculating the **exit pupil**. The exit pupil is calculated by dividing the magnification into the objective lens diameter. **For example**, with a 7x50 binocular the exit pupil is

approximately 7mm, and a 10x50 has an exit pupil of 5mm. The minimum exit pupil size for low light viewing is 4 to 5mm. All things being equal, anything smaller than 4mm will not provide bright images in low light. Bear in mind that low light isn't just the first or last 30 minutes of the day, but can be an overcast day or might be a situation you are faced with in heavy and dense wooded cover. The larger the exit pupil, the brighter the image will appear in low light. The exit pupil is the bright circle that is visible when holding the binocular at arms length and looking through the eyepiece.

**When not in use**, you should store your Steiner binocular is a cool dry area. Avoid direct sunlight and high temperature changes.

**Clean your binocular** by wiping the armor covering with a damp cloth. More stubborn dirt may require a light soap and water solution on a damp cloth. Clean the lenses only when necessary. **Remove any dust or dirt** with a soft brush or compressed air. There are many solutions on the



market designed to clean lenses. However, we recommend that you use a dry softened cotton cloth. A t-shirt or optics cleaning cloth that has been washed often works quite well. A lens pen, which are made especially for optics, also works quite well.

All Steiners are guaranteed against internal foaqina. However in extreme cold or when you have large differences in temperature, such as going from an air conditioned room to the heat and humidity of an outside summer day, you may see some external fogging. Another example: you're outdoors and it's below freezing, you pull the binocular to your eyes and it fogs from your body heat. If this happens, you should give the binocular additional clearance from your eyes to allow air to enter. Pull the binocular a few millimeters from your eyes. This will increase the air circulation around the eyepieces and eliminate any external fogging. Also, we sell a special No-Fog cloth that you can apply to the objective and ocular lenses.

**10 YEAR LIMITED WARRANTY**. Steiner-Germany guarantees this precision binocular to be free of mechanical and performance defects. The most advanced optical techniques as well as state of the art care in all phases of design, development, and manufacture allow us to provide you with a 10 year Warranty and registration.

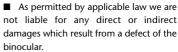
- The 10 year limited Warranty registration card must be completed and filled in at the time of purchase. Keep your original sales receipt as proof of purchase.
- 3 years after purchase Steiner will cover all cost for parts and labor due to any material or manufacturer defects
- 7 years after purchase Steiner will cover the cost for all materials due to material defect.
- Steiner reserves the option to repair or replace a defective product.
- Exterior parts such as the rubber armoring, carry straps, and eyecups are excluded from this warranty.
- Damage due to improper use are excluded from this warranty.
- In case of a warranty claim the binocular is to be shipped to:

# Pioneer Research Attn: Steiner Service Department 97 Foster Road, Suite 5 Moorestown NI 08057 USA

Keep your original sales receipt as proof of purchase.

<u>important!</u>

■ This warranty becomes void after an unauthorized repair or disassembly of any part of the binocular.



■ When navigating do not rely on any single method as a bearing. Always have a second or third technique to verify your navigational data. Steiner specifically disclaims any navigational error due to the use of the binocular.

■ Applicable law is the law of the Federal Republic of Germany. Located at the Court of Bayreuth, Germany.

## The following models feature a 10-year warranty:

- Predator 8x30, 12x40, 8x22, 10x26, 10x30, 12x30.
  - I Military/Marine Safari Big Horn
- Police Rallye Rocky Observer
  - Marine Navigator Merlin
- And similar models



**30 YEAR LIMITED WARRANTY**. Steiner-Germany guarantees this precision binocular to be free of mechanical and performance defects. The most advanced optical techniques as well as state of the art care in all phases of design, development, and manufacture allow us to provide you with a 30 year Warranty and registration.

- The 30 year limited Warranty registration card must be completed and filled in at the time of purchase. Keep your original sales receipt as proof of purchase.
- 10 years after purchase Steiner will cover all cost for parts and labor due to any material or manufacturer defects.
- 20 years after purchase Steiner will cover the cost for all materials due to material defect.
- Steiner reserves the option to repair or replace a defective product.
- Exterior parts such as the rubber armoring, carry straps, and eyecups are excluded from this warranty.
- Damage due to improper use are excluded from this warranty.
- In case of a warranty claim the binocular is to be shipped to:

#### Pioneer Research

**Attn: Steiner Service Department** 

97 Foster Road, Suite 5

#### Moorestown NJ 08057 USA

■ This warranty becomes void after an unauthorized repair or disassembly of any part of the binocular.

- As permitted by applicable law we are not liable for any direct or indirect damages which result from a defect of the binocular.
- When navigating do not rely on any single method as a bearing. Always have a second or third technique to verify your navigational data. Steiner specifically disclaims any navigational error due to the use of the binocular.
- Applicable law is the law of the

Federal Republic of Germany. Located at the Court of Bayreuth, Germany.

### The following models feature a 30-year warranty:

- Predator 8x32, 8x42, 10x42
- Nighthunter Senator Hunting Series
- Military/Tactical
- Commander

- Admiral
- Peregrine
- Harrier

And similar models



10x42 Predator



#### **Your New Steiner Binoculars**

When you get your new binoculars, be sure to inspect for the following:

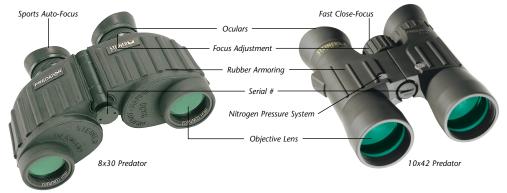
- Any damage from shipping the binocular.
- Make sure that all parts are included, such as lens caps, strap, rain guard and case if applicable. Keep in mind that not all models include lens caps or a case. Please contact Steiner for detailed product information on what items include which accessories.

- If the binocular you purchased is not in this Instruction manual, that is perfectly alright, follow the instructions for a similar model. We try our best to cover all current models as of this printing but sometimes new models are produced before we are able to make the printing changes.
- Keep the original binocular packaging in case you need to ship your binocular to us to be serviced. Use this package as an inner shipping container for your binoculars.
- Make sure you have this manual and a copy of the U.S. Warranty registration card, keep your original sales receipt as proof of purchase also.

# <u>important!</u>

Never look directly into the sun with your binoculars or any optical instrument.

**The Basics:** Here's a quick check of the features of your Steiner binocular. It's important that you understand the most important parts and features of your Steiner binoculars.



**Sports Auto-Focus:** This type of focus system is the easiest to use for distant objects of unknown distance, especially in low light settings. The depth of field is very high so re-adjustment should not be necessary or be very minimal. Some models also feature the Memory focus ring which marks the primary user's focus selection.

Go to pages 6-7 for detailed focusing instructions.

**Fast Close-Focus:** For close up viewing within 20 feet and rapidly changing distances the Fast Close-Focus focusing feature in Steiner's roof-prism style binoculars are the perfect choice. Some models will focus as close as within 6 feet. Close focusing from the far distance setting takes less than one full turn of the center-focus wheel on most models. *Turn to page 8 for detailed focusing instructions*.

## **Battery Compartment**

- Store batteries in cool dry place.
- Compartment is shielded, robust and easy to open without tools.
- Dispose of used batteries properly.
- See battery guide below.

# important!

If binocular is not used for a prolonged period of time, remove the batteries.

#### **Batteries Used:**

Commander	Commander Electronic	Navigator
Quantity: 2 (Alkaline)	Quantity: 3 (Lithium)	Quantity: 1 (Lithium)
Voltage: 1.55V	Voltage: 3V	Voltage: 3V
Type: V344, E344	Type: CR 1/3N	Type: CR 1/3N
Using a coin, rotate the cap counter clockwise to remove. Remove batteries by setting binocular on objective lenses.	Rotate cap <u>clockwise</u> by hand to remove. Set binocular on objective lenses to remove batteries.	Push slider down, while pulling hatch up. Remove battery by turning binocular upside down.







21

There are two types of strap attachment systems in the Steiner line. One is the traditional loop and buckle system; the other is Steiner's own Clic-Loc system which allows for fast removal and reattachment.

## Installing the loop strap:

- Place the binocular on a firm, level surface with the two slits in the rubber armoring facing you.
- Thread one side of the strap through the top of the binocular body and out through the bottom.
- Loop the strap upwards toward the buckle and thread the loose end through the back of the buckle.

## Installing Clic-Loc strap and lens covers (Figure A-C):

- Insert clip from binocular strap into the binocular's side attachment
- Slide clip into attachment until you feel it positively click into the binocular.
- To remove the strap push the circular shaped button located on the binocular strap attachment.
- While pushing the button pull the strap insert out of the attachment.

# **important!**Be sure to push the

circular click-lock

pulling off the neck

strap or lens caps.

hutton before

- The same technique is used to remove the lens caps as well (A).
- Make sure to push the button in all the way before removing insert.
- Use the strap slider to fasten the caps when removed from lenses (B & C).



# Installing the rain guard:

- The rain guard is designed to keep water and debris from the eyepiece.
- The rain guard should be installed before installing the strap to the binocular.
- Thread the strap through

the attachments on the rain guard.

- Install strap to binocular.
- The rain guard fits over the eyecups and can be quickly removed from eyepieces.



Lens Caps: The lens caps will protect your binocular from moisture and prevent dirt from collecting on the objective lenses. Using the caps will result in less frequent cleaning of the lenses.



eyecups: Standard on almost all Predator, Commander V and Nighthunter models; they eliminate any unwanted sidelight. Your view will be

brighter by eliminating any sidelight.

**Rubber Armoring:** All Steiner binoculars come standard with rhino tough rubber armor. Not only does this protect



the binocular from shock and damage, but it is also soft and comfortable in your hands. Clean only with damp cloth. Long Eye Relief: Most Steiner binoculars have long eye



relief. Use your thumbs to fold down the rubber eyepieces. Once folded down you will be able to view with eyeglasses or sunglasses.



**Memory Ocular:** The memory lock ring is unlocked by pressing both tabs with white dots on them and gently pulling upwards. Then turn to the desired setting. Push down on the

memory ring. The lock will engage and your setting can always be recalled.

# **Multi Purpose Gear Bags**

Steiner offers a full range of gear bags. These comfortable,



adjustable, padded, slip proof bags makes carrying your binocular easy. Help protect your investment with one of these durable gear bags.



**Serial number:** Almost every Steiner has a serial number. This allows us to track when your binocular was produced and allows you a way to

identify your binocular in case of loss or theft.

Compass: The Commander and Navigator binoculars



come available with a stabilized compass that is both durable and easy to use, day or night. The illumination button is easy to operate

even in cold weather while wearing gloves.
(also see page 12 for Commander Electronic Digital instructions.)







Compass Pointer (Navigator II)

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